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62	Stepwise Multiple)	9
	(Regression	
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64	Stepwise Multiple)	11
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67	(MANOVA)	14
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67	(F)	15
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($0.05 \geq \alpha$)

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ABSTRACT

Metacognition Awareness and its Relationship With Self-Efficiency and Achievement Motivation Among Students

**Rania Moslih Al-Shagaheen
Mu'tah Universit, 2014**

This study aimed to identify metacognition awareness level among Mu'tah university and to explain the relationship of awareness of metacognition with self-efficiency and achievement motive among these students. To achieve the goals of the study, three scales were administrated awareness of metacognition scale, self-efficiency scale, and achievement motive scale. These scales were checked for validity and reliability.

The sample of the study consisted of (667) students whom were selected using the random stratified method. The study that: the level of metacognition awareness and its dimensions among Mu'tah university students was moderate as the dimension of supervision came first while the dimension of evaluation came at the end of the list, The results also indicated no significant statistical differences at the value ($\alpha \leq 0,05$) among the dimensions of metacognition awareness (planning, supervision, and evaluation) among the students that are attributed to gender while there were significant statistical differences between the dimensions of supervision and evaluation that are attributed to specialty and these differences were in favor of scientific faculties students.

The study recommended with the necessity of developing and training teachers and faculty members on using strategies that focus on developing thinking and its skills, in particular, strategies of metacognition. In addition, the study recommended with focusing on topics that help in developing metacognition strategies in the curriculum of science by using questions that are based on scientific issues.

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(Metacognition)

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(Flavell)

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.(Flavell, 1976) "

(Costa,1991)

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.(Everson, 1997)

.(Maddux, 1998)

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(Costa,1991)

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(Servon & Beck)

.(2009)

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(Lindstrom,1995)

: **Metacognitio**

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": (Bandura,1977) : **Self - Efficacy**

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: **Achievement Motivation**

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(Metacognition)

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(Metacognition)

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.(2006) ...

(Metacognition)

(John Flavell)

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.(2006)

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" Thorndike"

(John Dewy)"

(Judd)

.(Langrehr & Plamer,1998)

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(Tilpin,2008)

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(Martinez,2006)

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(Shah,2009)

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.(Subocz,2007)

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(Brown,1980)

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: (Flavell,1981)

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١٢ : (Metacognitive Experiences) :

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(Wilen&Phillips,1995)

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:(Awareness) .1

: (Action) .2

(Schraw & Dennison)

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(Knowledge of Cognition) :

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:(Declarative Knowledge) () -

:(Procedural Knowledge) -

:(Conditional Knowledge) -

:(Regulation of Cognition) :

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(Pellingrino,2007)

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(Magiera,2008)	
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(Lindstrom,1995)	
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(Metacognitive Strategies)	
.(2001)	
(Broyon,2004)	

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.1 : (Self-Questioning Strategy)

.2 : (Concept Maps Strategy) (2006)

.3 : (Vee Diagram Strategy) (V) (2001)

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	(Theoretical/Conceptual)	.
	(Methodological)	.
(V)	(Focus question)	.
	:(Events/objects)	.
	.(2006)	
	: (Modeling Strategy)	.4
	.(2007)	
	: (Writing Reflection Strategy)	.5
	.(2006)	
	:(K-W-H)	.6
	: (Ogle)	
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	.(2008)	
	:(Thinking Aloud Strategy)	.7

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.(Bandura,1986)

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.(Bandura & Wood,1989)

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(Bandura,1977)

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(Hanover,2000)

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.1 : (Choice of Activities)

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.2 : (Learning and Achievement)

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.3 : (Effort and Persistence)

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(Bandura,1997)

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:(Performans accomplishment) :

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:(Vicarious experiences) :

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:(Verbal persuasion) :

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: (Emotional States) :

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: (Self-Assessment) :

: (Bandura, 1986)

:Magnitude .1

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:Generality .2

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:Strength .3

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.(Zimmerman,1989)

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(Batton,1980)

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(Bandura,1997) : .3

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.(Zimmerman,1989)

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(Bandura,1977)

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:Self-Observation .1

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:Self-Judgment .2

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:Self-Reaction .3

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(Bandura,1977)

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(Pajares, 1999)

.(Lewis & Maddux,1995)

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(Gillespie& Hillmen,1993)

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(Atkinson,1958)

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(McClelland,1961)

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(Attribution Theory)

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(Learned helplessness)

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(Achievement Goal Theory) :

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(Mastery task_oriented)
(performance-oriented)
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(Self-determining Self-regulation)

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(Atkinson)

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(Bandura, 1997)

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.(Gillespie& Hillmen,1993)

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(Brooks,2004)

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(Hanover,2000)

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(Voelk& Michael,2004)

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(Schwazer)

(Britner & Pajares,2006)

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(Ronald,2006)

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Carroll, Houghten,)

(Wood,Unsworth, Hattie et al , 2009

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.(Sungur,2007)

) (Hanover, 2000)

Ronald,) (Voelk & Michael, 2004) (2001) (2000
(2006

Britner & Pajares,) (2005)

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%44	9468
%56	12049
%100	21517
%44.4	9554
%55.6	11963
%100	21517

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(%4) (867)

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40.8	272
59.2	395
100.0	667
41.1	274
58.9	393
100.0	667

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(31) (%80)
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(52=)

.(3)

(0.05≥α)

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.722**	24	.533**	14	.591**	1
.732**	25	.722**	15	.782**	2
.858**	26	.705**	16	.794**	3
.817**	27	.759**	17	.648**	4
.846**	28	.745**	18	.568**	5
.708**	29	.784**	19	.599**	6
.645**	30	.821**	20	.767**	7
.766**	31	.751**	21	.796**	8
		.788**	22	.877**	9
		.578**	23	.601**	10
				.831**	11
				.667**	12
				.866**	13
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-0.533)			(3)		
	.(0.01≥α)				(0.877
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.947 ^{**}
.967 ^{**}
.949 ^{**}

(52)

(15)

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(5)

0.91	0.88	13
0.89	0.89	10
0.89	0.85	8
0.93	0.90	31

-0.85) (5)
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Schwarzer et)
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.619**	41	.594**	31	.504**	21	.519**	11	.466**	1
.624**	42	.487**	32	.580**	22	.488**	12	.559**	2
.756**	43	.650**	33	.623**	23	.543**	13	.602**	3
.701**	44	.365**	34	.546**	24	.732**	14	.559**	4
.379**	45	.612**	35	.562**	25	.532**	15	.619**	5
.339*	46	.410**	36	.653**	26	.709**	16	.756**	6
.529**	47	.466**	37	.694**	27	.571**	17	.535**	7
.463**	48	.559**	38	.511**	28	.723**	18	.633**	8
.591**	49	.602**	39	.578**	29	.334*	19	.439**	9
.741**	50	.559**	40	.557**	30	.463**	20	.361**	10

(0.01≥α) **

(0.05≥α) *

(0.756-0.334)

(0.05≥α)

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(.77)

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(0.05 $\geq\alpha$)

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.307 [*]	22	.323 [*]	15	.355 ^{**}	8	.374 ^{**}	1
.612 ^{**}	23	.404 ^{**}	16	.587 ^{**}	9	.379 ^{**}	2
.487 ^{**}	24	.500 ^{**}	17	.505 ^{**}	10	.357 ^{**}	3
.478 ^{**}	25	.365 ^{**}	18	.509 ^{**}	11	.529 ^{**}	4
.408 ^{**}	26	.456 ^{**}	19	.323 [*]	12	.537 ^{**}	5
.641 ^{**}	27	.311 [*]	20	.397 ^{**}	13	.624 ^{**}	6
.593 ^{**}	28	.509 ^{**}	21	.597 ^{**}	14	.623 ^{**}	7

(0.01 $\geq\alpha$) **

(0.05 $\geq\alpha$) *

(0.641-0.307)

($0.05 \geq \alpha$)

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(0.81)

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(MANOVA)	.5
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(8)

2	.49	2.32
1	.53	2.33
3	.48	2.31
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: (9) (Stepwise Multiple Regression)

(9)

(Stepwise Multiple Regression)

()					
					R ²
		9.253	1	9.253	
.000	204.838	.045	665	30.040	0.235
			666	39.293	
		5.814	2	11.628	
.000	139.538	.042	664	27.665	0.061
			666	39.293	
		4.019	3	12.056	
.000	97.824	.041	663	27.237	0.011
			666	39.293	

(%23.5)

(9)

(204.838) =()

(%6.1)

(000)

(139.538) =()

(%1.1)

(000)

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(000)

(97.824) =()

(%30.7)

(

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(10)

beta			B	
.000	35.736		.045	1.618
.000	5.351	.244	.024	.129
.000	7.061	.277	.018	.127
.001	3.230	.137	.021	.069

(10)

()

(3.230 7.061 5.351) ()

:

*0.069 + *0.127 + *0.129 +1.618 =

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(sungur,2007)

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: (11) (Stepwise Multiple Regression)

(11)

(Stepwise Multiple Regression)

()					
				R ²	
		17.898	1	17.898	
.000	259.620	.069	665	45.844	0.281
			666	63.742	
		11.889	2	23.777	
.000	197.525	.060	664	39.965	0.092
			666	63.742	
		8.273	3	24.818	
.000	140.905	.059	663	38.925	0.016
			666	63.742	

(%28.1) (11)

(259.620) =()

(%9.2) (000)

(197.525) =()

(%37.3) (000)

(%1.6)

(000) (140.905) =()

(%38.9) ()

(12)

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(12)

beta		b		
.000	39.424		.054	2.134
.000	8.645	.318	.021	.185
.000	6.293	.251	.025	.160
.000	4.209	.180	.029	.122

(12)

()

(4.209 6.239 8.645) ()

:

*0.122 + *0.160 + *0.185 +2.134 =

.

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(0.05≥α)

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: (13)

(13)

2.37	2.33	2.35
272	272	272
.45	.45	.43
2.27	2.32	2.31
395	395	395
.50	.58	.48
2.40	2.44	2.33
274	274	274
.41	.46	.38
2.24	2.25	2.31
393	393	393
.52	.56	.50

(13)

: (14) (MANOVA)

(14)
(MANOVA)

()				
.236	1.419	.006	Hotelling's	Trace
.000	12.640	.057	Hotelling's Trace	

(14)

= (Hotelling's Trace)

(0.378)= (1.031) = () (0.005)

= (Hotelling's Trace)

(0.000)= (10.221) = () (0.046)

. (15) ()

(15)

(F)

()				
		.064	1	.064
.582	.303	.211	665	140.239
			666	140.303
		5.540	1	5.540
.000	20.195	.274	665	182.414
			666	187.954
		4.047	1	4.047
.000	17.617	.230	665	152.775
			666	156.823

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$(0.05 \geq \alpha)$

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186-158 (12)1 .
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